

is to be cultivated by assiduous and systematic practice so as to detect the slightest deviation from the normal sounds, and this deviation must be at once traced up to its anatomical and physiological cause. There is something, moreover, peculiarly attractive and even fascinating to an investigating mind in the study of this class of diseases; there is not only the pleasure and the excitement consequent on the investigation of morbid phenomena, but there is the satisfaction growing out of a discovery of their causes, as confirmed by the unerring scalpel. In regard to many other diseases, where physical diagnosis is inapplicable and post-mortem research fails to reveal their secret and hidden seats, there is a painful uncertainty and mystery thrown around them, and so unsatisfactory have been all former attempts to reveal their pathological nature, that the mind instinctively shrinks, almost, from grappling with them. Such are tetanus, hydrophobia, neuralgia, &c. But, in diseases of the heart, the practised hand and the cultivated ear rarely meet with any insuperable obstacles. Here symptoms become *signs* which infallibly point to their pathological cause. Principles, and laws, and rules are thus deduced, which serve as a point of departure for all future study and observation.

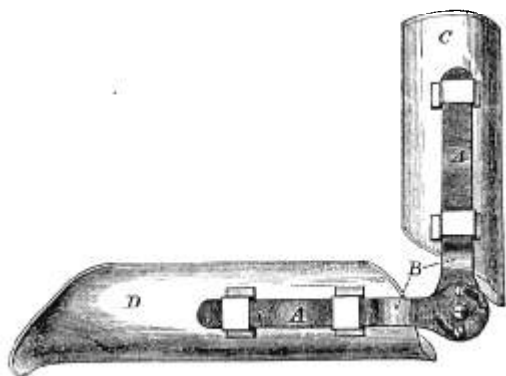
At present I have only taken up one phenomenon, one of the least important of all the phenomena connected with the heart, to show how, from imperfect observation, or rather from ignorance, its importance has been overrated, and how inferences have been drawn from it, not warranted by any of the facts of cardiac pathology, and that the existence of organic disease of this organ is to be ascertained by a different class of phenomena, viz., unnatural sounds or murmurs, and by percussion.

ART. IV.—*Description of a New Splint for Dressing Diseases and Injuries of the Elbow-Joint.* By HENRY BOND, M. D. (With a wood-cut.)

SEVERAL years ago, I had under my care a severe case of scrofulous disease of the elbow, where it was important to relieve the joint from the irritation occasioned by flexion, extension or pressure, and for a long time to keep remedies continuously applied to the part. The patient was a very responsible officer in a public institution of the first importance, and his services at that time were nearly indispensable, and required much time and very close and careful attention. It was, therefore, desirable to adopt a dressing that would interfere the least with the discharge of his official duties, and, at the same time, admit the most efficient treatment of the disease. I examined surgical books, and visited the shops of surgical instrument-makers; but I found nothing that seemed to meet satisfactorily the desiderata in his case. One objection was that none of them would afford a comfortable, as well as secure, rest or support to the affected limb; and this was a point of

some importance, at least to the patient, in a case where the dressing was to be worn continuously for months. As the joint, at first, was found at an inconvenient obtuse angle, and, if the limb were saved, it would probably be with ankylosis, one object was to bring it to a right angle, by the use of a jointed splint. But the chief objection was that, in cases of enlargement of the joint from whatever cause, whether from scrofula, as in the case then before me, or from the inflammation and tumefaction, very often attendant on severe injuries of the elbow, they must press upon the part affected, unless a large amount of cushions and compresses be employed; and whenever a splint requires this, it is an evidence of its imperfect adaptation to the case, and the difficulty of its application is correspondently increased. The unskilful use of compresses is the cause of a large proportion of the deformities resulting from fractures.

In this emergency I contrived a splint, which was made for me by my friend, the late Mr. John Rorer,¹ and which proved to be entirely satisfactory to myself and to my patient. As I see no one, among the several splints, illustrated in the recent report of Dr. F. H. Hamilton, nor in other late works on surgery, which seems to me so well adapted to the treatment of such affections, I will offer the contrivance to the trial of others, if you, Mr. Editor, shall think sufficiently favourably of it, and that I have not misjudged its utility. I do this the more confidently, from the statement of Dr. Mütter, that he had made use of it with entire satisfaction, and had exhibited it repeatedly to his class, pronouncing it superior to any other apparatus for the treatment of such affections.



Explanation of the Figure.—A, A, two steel plates, each about one inch wide and seven inches long, united in a joint, the motion of which is controlled by three screws. The central screw is the pivot upon which the joint

¹ This splint may be obtained of Mr. J. H. Gemrig, at 109 South Eighth Street, below Chestnut.

moves. The other screws are inserted through two fenestræ in the outer plate; and these fenestræ are of such a length or extent, as to allow the requisite variation of the angle, from a right angle to a very obtuse one, and so narrow that the heads of the screws when driven in will press upon their edges. Where the screws are partially withdrawn, the joint may be moved, and such an angle assumed as the limb to which it is to be applied may require; and then the screws are to be driven in firmly. Where the steel plates come in contact with each other, they should be made rough, or their polish taken off by filing or grinding; otherwise the screws may not always prevent the sliding of one plate upon the other. At *B, B*, about an inch and a half from the pivot-screw, there is a double bend in each plate, in order to throw out the joint so far (about $\frac{1}{2}$ of an inch), that it may not press upon or touch the swollen elbow.

C and *D*, two tin plates (tinned iron), each about four or five inches wide; the upper one (*C*), which is intended for the arm, about seven inches, and the other (*D*), intended for the forearm from nine to eleven inches in length, the dimensions of each varying according to those of the limb, to which the splint is to be applied. They may be made of such light tin-plate, as to be easily bent and adjusted to the limbs. The edge of the lower end of *D* is bent or turned outward, so that it may not present a sharp edge to the wrist or hand that may rest upon it. Upon the convex or outward side of each are tin loops for the insertion of the steel plates; and these are to be shoved in so as to bring the tin plates more or less near to the elbow, accordingly as its condition may admit or require. The tin loops are not attached midway between the lateral edges of the tin plates (as they appear to be in the wood-cut, which presents only a direct lateral view, or profile of the splint), but are so attached that the tin plates will extend quite round behind the arm, and under the forearm.

Where no artisan is at hand competent to make such a joint as is described above, the surgeon may direct any black or tin smith to rivet two steel plates together, at the required angle, and to make the double bend in each plate, as seen at *B, B*. A series of steel plates thus riveted together at various angles, would be a useful substitute for a movable joint in cases where it may be necessary to vary the angle of the elbow.

The patient was of a decidedly scrofulous diathesis, which had been repeatedly evinced by affections of the glands, the skin, and the eyes; and the treatment was, therefore, both constitutional and local. Tonics, both vegetable and mineral were employed; but the chief reliance was placed on the use of iron, in different forms, either the iodide or the tartrate in the form of a saline chalybeate, imitating the Cheltenham water. The following formula was employed much more than any other: *R.*—Magnes. sulph. $\mathfrak{z}\text{j}$; Potass. bitart. $\mathfrak{z}\text{j}$; Ferri sulph. gr. x. Dissolve this in a quart of water and take from $\mathfrak{z}\text{iiij}$ to $\mathfrak{z}\text{vj}$, daily, in divided doses, varying the quantity according to the condition of the bowels; using enough to keep them free, but not

enough to produce purgation. Bathing and attention to diet were not neglected. Sea-air and sea-bathing were resorted to for a short time.

Leeches and blisters were employed at first, and some use was made of tinct. of iodine; but the local remedy chiefly relied on was a solution of iodid. potass. (ʒiv to ʒvj in water ʒxvj), sometimes alternated by the employment of a solution of muriate of soda. Strips of soft, thick muslin or cotton-flannel, thoroughly wetted with the solution, were wrapped around so as to cover the affected part, and this was immediately covered with oiled silk. The silk protected the sleeve from the solution and prevented evaporation, so that by renewing the dressing every eight or twelve hours, the elbow remained constantly moistened by the solution; and this was continued many weeks. The splint, with a thin lining of flannel or wadding, was secured to the arm by a roller, or more frequently in warm weather by a few strips of muslin tied around.

This dressing, with the splint well adjusted to the size of the limb, added so little to the dimension of the limb, that the patient could wear a loose sleeve. A sling was sometimes used, but it was oftener omitted, the lightness of the dressing rendering it less necessary than is usual in the treatment of such affections.

The patient entirely recovered from the scrofulous affection, with some enlargement of the bones, and a partial use of the elbow-joint.

July, 1857.

ART. V.—*Successful Employment of Marshall Hall's Ready Method in the Case of an Infant born Asphyxiated.* By FREDERIC D. LENTE, M. D., of Cold Spring, N. Y. (With a wood-cut.)

SINCE the enunciation of Dr. Hall's *rules* for the recovery of drowned persons and stillborn infants, a sufficient number of instances of their practical application to such cases have been afforded the public by his medical friends in Great Britain to prove their great superiority over every method previously employed. I have not as yet met with any public testimony of their efficacy on this side the water, with one exception. A remarkable case of the recovery of a patient, poisoned by laudanum, by this method, was reported to the Society of Statistical Medicine, Jan. 12, 1857, by Dr. Lewis, of New York. [See *N. Y. Journ. of Med.* for Mar. 1857, and *Am. Journ. of Med. Sci.* for April.] Regarding this as one of the most important steps in the advancement of medical science, it affords me great pleasure to be able to present a very satisfactory instance of its successful application.

Mrs. H., aged about 25, was taken in her second labour June 29th, 1857. In the previous labour, the presentation was breech; and, owing to the delay